

ABSTRACT

The invention provides a liquid crystal display that does not deteriorates the picture quality and facilitates the contrast adjustment with a simple construction. In order to achieve the object, the liquid crystal display of the invention contains A/D converters that convert the luminance signal Y and the two color-difference signals (Pr, Pb) of an input video signal each into digital signals in correspondence with the respective signals, and a variable power supply that sets the magnitudes of the reference voltage ranges to determine the upper limit voltages and the lower limit voltages of the digital signals to one identical magnitude, which is given to each of these A/D converters. The digital signals outputted from these A/D converters and the synchronizing signal outputted from the PLL circuit are inputted to the PLD, and these digital signals are outputted to the subsequent scanning line driving circuit and the signal line driving circuit synchronously with the synchronizing signal, thus displaying the picture images on the liquid crystal panel.